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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,409	01/21/2004	Gerard D. Agnew	84732/2900 TAL	1209
20736	7590	11/03/2006	EXAMINER	
MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307			MERCADO, JULIAN A	
			ART UNIT	PAPER NUMBER

1745

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/760,409	<b>Applicant(s)</b> AGNEW ET AL.	
	<b>Examiner</b> Julian Mercado	<b>Art Unit</b> 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2004-02-19, 2004-01-21</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Remarks***

Claims 1-26 are originally presented.

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Great Britain on July 24, 2001 and based on a PCT application GB2002/003190. It is noted, however, that applicant has not filed a certified copy of the 0117939.9 application as required by 35 U.S.C. 119(b); a copy of the international application is also absent from the file.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on February 19, 2004 and on January 21, 2004 has been considered by the examiner.

### ***Claim Objections***

Claims 5-26 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

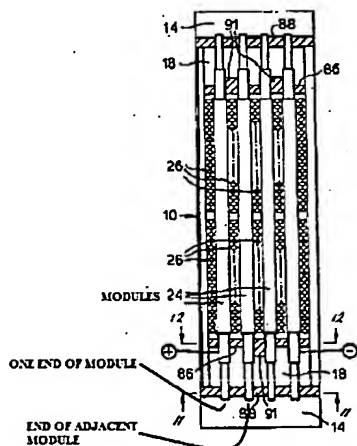
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardner et al.

(U.S. Pat. 5,486,428).

For claim 1, Gardner et al. teaches a solid oxide fuel cell stack [10] comprising a plurality of modules [24], each module comprising an elongate hollow member [36] each hollow member having parallel flat surfaces and a plurality of hollow passages [30] extending longitudinally therethrough for the flow of a reactant, as shown in Figure 4. (also applies to claim 4) See col. 5 lines 1-30. The modules include a plurality of solid oxide fuel cells [22] arranged on the flat surfaces of the modules. (Figure 4, ib., see also col. 8 line 29 et seq.) Figure 10 shows that adjacent modules [24] are arranged substantially parallel and spaced apart, as shown in Figure 10, appended herein:

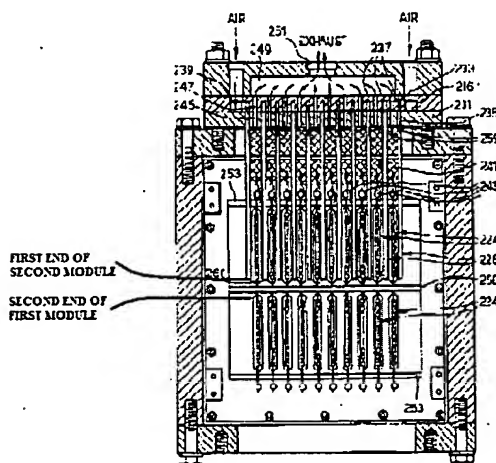
Fig.10.



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In applying Gardner et al. as a basis for rejection, the examiner notes that claim 1 merely recites “one end... being connected to an end of an adjacent module...”, and reference characters [34] and [36] are used to designate the claimed “one end” and the claimed “end of an adjacent module” (respectively), the examiner asserts that while claims are read in light of the specification, limitations that may be ascertained from the specification or its drawings are not read into the claims. Accordingly, the limitation drawn to “one end... being connected to an end of an adjacent module...” has been given its broadest reasonable interpretation such as shown by Gardner et al., e.g. the first end of a first module being adjacent a first end of a second module, e.g. disposed end-to-end in parallel, as shown in Figure 10, while also showing a plurality modules [224] whereby the second end of a first module is adjacent a first end of a second module, e.g. disposed in end-to-end in series, as shown in Figure 21, appended herein:

Fig.21.



With respect to the claimed one end of each module being connected to an end of an adjacent module “to allow reactant to flow sequentially through the modules (12),” this limitation has not been given patentable weight as it drawn to a functional limitation; the

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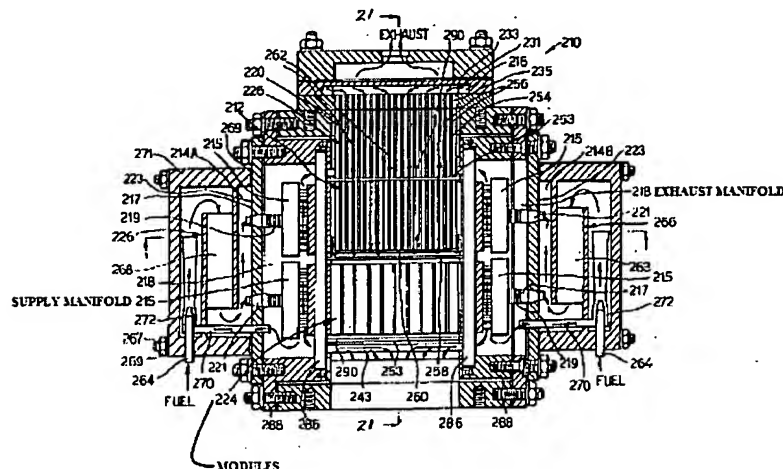
examiner asserts that the instant “solid oxide fuel cell stack” must be distinguished from the prior art in terms of structure rather than function. Notwithstanding, Figure 21 such as shown above is considered to show modules disposed sequentially such that from a functional standpoint, the resultant flow is in sequence, i.e. flowing from the first module and into the second. See col. 14 line 13 et seq.

As to the claimed reduction in the “thermal and mechanical stresses in the solid oxide fuel cell stack...”, for similar reasons set forth in the immediately preceding paragraph, this limitation has not been given patentable weight as it drawn to a functional limitation; the examiner asserts that the instant “solid oxide fuel cell stack” must be distinguished from the prior art in terms of structure rather than function. Notwithstanding, Gardner et al.’s invention specifically discloses the advantage of “thermally expand[ing]/contract[ing] freely...” along with “reduce[d] stresses....” See col. 14 lines 40-44.

For claim 2, a manifold [215] is for the supply of a reactant and a manifold [218] is for the removal of the reactant. See col. 12 lines 52-58. As discussed above, each module [224] has the second end of a first module adjacent and connected to a first end of a second module, as shown in Figure 21. (also applies to claim 3) Figure 19 is relied upon to further show that the ends of the series of modules [224] are connected to the manifolds [215] and [218] for supply

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and removal of the reactant, respectively. (ib.) Annotated Figure 19 is appended herein:



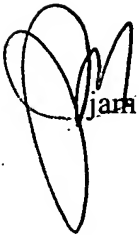
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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Handwritten signature of Patrick Joseph Ryan, with the name "Ryan" written below it.



PATRICK JOSEPH RYAN  
SUPERVISORY PATENT EXAMINER